

# KINGSTAR 4.4

## SUPPORTED HARDWARE

KS-DOC-x64-0001-R27

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IntervalZero



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# Servo drives

Device	Information
ABB MicroFlex e190	<a href="https://new.abb.com/drives/low-voltage-ac/servo-products/microflex-e190">https://new.abb.com/drives/low-voltage-ac/servo-products/microflex-e190</a>
ACS Motion Control IDM	<a href="http://acsmotioncontrol.com/products/idm-servo-drives/idmsm/">http://acsmotioncontrol.com/products/idm-servo-drives/idmsm/</a>
Axor Mack Uninano (MKUN) series	<a href="http://www.axorindustries.com/en/products/mack-uninano/">http://www.axorindustries.com/en/products/mack-uninano/</a>
Baumüller b maXX 2500	<a href="http://www.baumueller.com/en/products/drive-electronics/servo-drives">http://www.baumueller.com/en/products/drive-electronics/servo-drives</a>
Baumüller b maXX 5500	<a href="http://www.baumueller.com/en/products/drive-electronics/servo-drives/bmaxx5500">http://www.baumueller.com/en/products/drive-electronics/servo-drives/bmaxx5500</a>
Beckhoff EL7211- 0010	<a href="http://www.beckhoff.com/en-en/products/i-o/ethercat-terminals/el7xxx-compact-drive-technology/el7211-0010.html">http://www.beckhoff.com/en-en/products/i-o/ethercat-terminals/el7xxx-compact-drive-technology/el7211-0010.html</a>
Beckhoff EL7201- 0011	<a href="http://www.beckhoff.com/en-en/products/i-o/ethercat-terminals/el7xxx-compact-drive-technology/">http://www.beckhoff.com/en-en/products/i-o/ethercat-terminals/el7xxx-compact-drive-technology/</a>
Beckhoff EL7221- 9014	<a href="http://www.beckhoff.com/en-us/products/i-o/ethercat-terminals/el7xxx-compact-drive-technology/el7221-9014.html">http://www.beckhoff.com/en-us/products/i-o/ethercat-terminals/el7xxx-compact-drive-technology/el7221-9014.html</a>
Copley Accelnet	<a href="http://www.copleycontrols.com/en/products">http://www.copleycontrols.com/en/products</a>

<b>Device</b>	<b>Information</b>
Copley AEV	<a href="http://www.copleycontrols.com/en/products">http://www.copleycontrols.com/en/products</a>
Copley Stepnet	<a href="http://www.copleycontrols.com/en/products">http://www.copleycontrols.com/en/products</a>
Copley Xenus	<a href="http://www.copleycontrols.com/en/products">http://www.copleycontrols.com/en/products</a>
Delta ASDA-A2 series	<a href="http://bit.ly/2n5J3FC">http://bit.ly/2n5J3FC</a>
Delta ASDA-A3 series	<a href="http://bit.ly/2VteaQB">http://bit.ly/2VteaQB</a>
Elmo Gold	<a href="http://bit.ly/37vpf7O">http://bit.ly/37vpf7O</a>
ESTUN ProNet-EC	<a href="http://www.estun.com/?list_23/">http://www.estun.com/?list_23/</a> (Simplified Chinese)
ESTUN ProNet Summa ED3S <sup>1</sup>	<a href="http://www.estun.com/?list_23/433.html">http://www.estun.com/?list_23/433.html</a> (Simplified Chinese)
Etel AccurET 400	<a href="http://www.etel.ch/motion-control/accuret-modular/">http://www.etel.ch/motion-control/accuret-modular/</a>
Faulhaber Motion Controllers series 5004	<a href="http://www.faulhaber.com/en/products/series/mc-5004-p/">http://www.faulhaber.com/en/products/series/mc-5004-p/</a>
Faulhaber Motion Controllers series 5005	<a href="http://www.faulhaber.com/en/products/series/mc-5005-s/">http://www.faulhaber.com/en/products/series/mc-5005-s/</a>
Faulhaber Motion	<a href="http://www.faulhaber.com/en/products/series/mc-5010-s/">http://www.faulhaber.com/en/products/series/mc-5010-s/</a>

Device	Information
Controllers series 5010	
Faulhaber Motion Control Systems series MCS	<a href="http://www.faulhaber.com/en/products/motors-with-integrated-electronics/faulhaber-mcs/">http://www.faulhaber.com/en/products/motors-with-integrated-electronics/faulhaber-mcs/</a>
Festo CMMP-AS- C2-3A-M3	<a href="http://www.festo.com/us/en/a/1501325/">http://www.festo.com/us/en/a/1501325/</a>
Festo CMMT-AS- M3	<a href="http://www.festo.com/">http://www.festo.com/</a>
Festo EMCA	<a href="http://www.festo.com/cms/nl-be_be/60236.htm">http://www.festo.com/cms/nl-be_be/60236.htm</a> (Dutch)
Fuji ALPHA5 series	<a href="http://www.fujielectric.com/products/servo/alpha5/">http://www.fujielectric.com/products/servo/alpha5/</a>
Han's Robot D-Module series Modular	<a href="http://www.hansrobot.net/elfin">http://www.hansrobot.net/elfin</a>
HDT NTT 240/460	<a href="http://www.hdtlovato.com/ntt240-874">http://www.hdtlovato.com/ntt240-874</a> <a href="http://www.hdtlovato.com/ntt460-238">http://www.hdtlovato.com/ntt460-238</a>
HIWIN D1/D1- N/D2 Rev4	<a href="http://www.hiwinmikro.tw/en/product/controller-drive">http://www.hiwinmikro.tw/en/product/controller-drive</a>
HIWIN E1 <sup>2</sup>	<a href="http://www.hiwinmikro.tw/en/product/controller-drive/drive-e1">http://www.hiwinmikro.tw/en/product/controller-drive/drive-e1</a>
Ingenia Capitan	<a href="http://ingeniamc.com/servo-drives/capitan-xcr-panel-mount-ethercat/">http://ingeniamc.com/servo-drives/capitan-xcr-panel-mount-ethercat/</a>

Device	Information
XCR-E	
Ingenia Everest XCR 30/80	<a href="http://ingeniamc.com/servo-drives/dc/ethercat/everest-xcr-30a-80v-panel-mount">http://ingeniamc.com/servo-drives/dc/ethercat/everest-xcr-30a-80v-panel-mount</a>
Inovance IS620N	<a href="https://www.inovance.eu/products/servo-drives-motors/is620n-servo-drive">https://www.inovance.eu/products/servo-drives-motors/is620n-servo-drive</a>
Inovance SV635N	<a href="https://www.inovance.eu/products/servo-drives-motors">https://www.inovance.eu/products/servo-drives-motors</a>
*ITRI Drive 16bit	<a href="http://www.itri.org.tw/english/">http://www.itri.org.tw/english/</a>
KEB COMBIVERT F6-K	<a href="http://www.kebamerica.com/products/combivert-f6/">http://www.kebamerica.com/products/combivert-f6/</a>
Kinco FD3	<a href="http://en.kinco.cn/productdetail/33.html">http://en.kinco.cn/productdetail/33.html</a>
Kollmorgen AKD EtherCAT Drive	<a href="http://www.kollmorgen.com/en-us/products/drives/servo/akd/">http://www.kollmorgen.com/en-us/products/drives/servo/akd/</a>
LS Mecapion L7N	<a href="http://www.lsmecapion.com">http://www.lsmecapion.com</a> (Korean)
Maxon Motor EPOS4 70/15	<a href="http://www.maxongroup.com/maxon/view/product/control/Positionierung/594385">http://www.maxongroup.com/maxon/view/product/control/Positionierung/594385</a>
Maxon Motor Maxpos	<a href="http://www.maxongroup.com/maxon/view/content/MAXPOS-Detailsite">http://www.maxongroup.com/maxon/view/content/MAXPOS-Detailsite</a>

<b>Device</b>	<b>Information</b>
Metronix BL 4102-C	<a href="http://www.metronix.de/metronixweb/index.php?id=122&amp;L=1">http://www.metronix.de/metronixweb/index.php?id=122&amp;L=1</a>
Mitsubishi MR-J4-TM	<a href="http://us.mitsubishielectric.com/fa/en/products/drive-products/ac-servos-melservo/melservo-j4/servo-amplifier/mrj4tmecat">http://us.mitsubishielectric.com/fa/en/products/drive-products/ac-servos-melservo/melservo-j4/servo-amplifier/mrj4tmecat</a>
Mitsubishi MR-J5-G- N1	<a href="http://www.mitsubishielectric.com/fa/products/driv/servo/pmerit/mr_j5/amp/feature.html">http://www.mitsubishielectric.com/fa/products/driv/servo/pmerit/mr_j5/amp/feature.html</a>
*Newport XPS-RL series	<a href="http://www.newport.com/c/xps-universal-multi-axis-motion-controller">http://www.newport.com/c/xps-universal-multi-axis-motion-controller</a> (Simplified Chinese)
Omron G5	<a href="http://www.ia.omron.com/products/family/2644/">http://www.ia.omron.com/products/family/2644/</a>
Panasonic Minas A5 series	<a href="http://www3.panasonic.biz/ac/ae/motor/fa-motor/ac-servo/a5/index.jsp">http://www3.panasonic.biz/ac/ae/motor/fa-motor/ac-servo/a5/index.jsp</a>
Panasonic Minas A6 series	<a href="http://www3.panasonic.biz/ac/ae/motor/fa-motor/ac-servo/a6/index.jsp">http://www3.panasonic.biz/ac/ae/motor/fa-motor/ac-servo/a6/index.jsp</a>
Panasonic Minas A6BM	<a href="http://www3.panasonic.biz/ac/e/motor/fa-motor/ac-servo/ethercat/index.jsp">http://www3.panasonic.biz/ac/e/motor/fa-motor/ac-servo/ethercat/index.jsp</a>
Phase AXM II	<a href="http://www.phase.eu/en/products/drive-technology/drive-controller/ax-drives/">http://www.phase.eu/en/products/drive-technology/drive-controller/ax-drives/</a>
RS Automation CSD7_ 01BN1	<a href="http://eng.rsautomation.shop/shop/shop.php?ptype=view&amp;prcode=2010070007">http://eng.rsautomation.shop/shop/shop.php?ptype=view&amp;prcode=2010070007</a>
Sanyo Denki RF2 <sup>3</sup>	<a href="http://www.sanyodenki.com/">http://www.sanyodenki.com/</a>



<b>Device</b>	<b>Information</b>
Sanyo Denki RS2	<a href="http://bit.ly/2nK30Ay">http://bit.ly/2nK30Ay</a>
Sanyo Denki RS2H	<a href="http://bit.ly/2nK30Ay">http://bit.ly/2nK30Ay</a>
Sanyo Denki RS3 3E	<a href="http://bit.ly/2nK30Ay">http://bit.ly/2nK30Ay</a>
Schneider Electric Lexium 28E and BCH2	<a href="http://bit.ly/2xPoEec">http://bit.ly/2xPoEec</a>
Servotronic CDHD	<a href="http://www.servotronic.cn/product/cdhd-servo-drives/">http://www.servotronic.cn/product/cdhd-servo-drives/</a>
Shihlin Electric SDP-E	<a href="http://bit.ly/3oigUKG">http://bit.ly/3oigUKG</a>
Sinamics S120 via Robox module	<a href="http://sie.ag/3mhZD2v">http://sie.ag/3mhZD2v</a> <a href="http://www.robox.it/en-US/showcateg.php?idcap=IO.P">http://www.robox.it/en-US/showcateg.php?idcap=IO.P</a>
TDE OPDE	<a href="http://www.bdfindustriesgroup.com/products/opde/">http://www.bdfindustriesgroup.com/products/opde/</a>
Teco JSDG2	<a href="http://globalsa.teco.com.tw/products_series.aspx?KindID=1&amp;ID=4">http://globalsa.teco.com.tw/products_series.aspx?KindID=1&amp;ID=4</a>
TPM SVR- K111	<a href="http://www.tpm-pac.com/product/svr-k111/">http://www.tpm-pac.com/product/svr-k111/</a>
TPM SVR- K112	<a href="http://www.tpm-pac.com/product/svr-k112/">http://www.tpm-pac.com/product/svr-k112/</a>
TQ Systems SDB-40-100	<a href="http://www.tq-group.com/en/products/tq-robodrive/">http://www.tq-group.com/en/products/tq-robodrive/</a>

Device	Information
Tsino Dynatron CoolDrive A8	<a href="http://www.tsino-dynatron.com/en/common/product_detail.aspx?nodeid=255">http://www.tsino-dynatron.com/en/common/product_detail.aspx?nodeid=255</a>
TSV-HL	Website is unavailable.
Wittenstein cyber simco	<a href="https://cyber-motor.wittenstein-us.com/products/servo-drives/">https://cyber-motor.wittenstein-us.com/products/servo-drives/</a>
XINJE-DS5- C	<a href="http://www.xinje.com/xj_product/show-3831.html">http://www.xinje.com/xj_product/show-3831.html</a> (Simplified Chinese)
YAKO MS- Mini3E	<a href="http://www.yakotec.com/index.php/proview-137-42.html">http://www.yakotec.com/index.php/proview-137-42.html</a>
Yaskawa Sigma-5	<a href="http://www.yaskawa.com/products/motion/sigma-5-servo-products">http://www.yaskawa.com/products/motion/sigma-5-servo-products</a>
Yaskawa Sigma-7	<a href="http://www.yaskawa.com/products/motion/sigma-7-servo-products">http://www.yaskawa.com/products/motion/sigma-7-servo-products</a>

<sup>1</sup> Supports only Profile Velocity (PV), Profile Position (PP), and Cyclic Synchronous Position (CSP).

<sup>2</sup> `homingSlave` may not work at times due to a firmware issue.

<sup>3</sup> Four axes.

\*Yet to be tested.

# Stepper drives

Device	Information
Applied Motion Products SS05-EC-D	<a href="http://www.applied-motion.com/products/steppervo-drives/ss05-ec-d">http://www.applied-motion.com/products/steppervo-drives/ss05-ec-d</a>
Applied Motion Products STF-EC	<a href="http://www.applied-motion.com/products/series/stf-stepper-drives">http://www.applied-motion.com/products/series/stf-stepper-drives</a>
Beckhoff EL7031	<a href="http://www.beckhoff.com/en-us/products/motion/servo-drives/i-o-components/el7031.html">http://www.beckhoff.com/en-us/products/motion/servo-drives/i-o-components/el7031.html</a>
Beckhoff EL7037	<a href="http://www.beckhoff.com/en-us/products/motion/servo-drives/i-o-components/el7037.html">http://www.beckhoff.com/en-us/products/motion/servo-drives/i-o-components/el7037.html</a>
Beckhoff EL7041, EL7041-1000	<a href="http://www.beckhoff.com/en-us/products/motion/servo-drives/i-o-components/el7041.html">http://www.beckhoff.com/en-us/products/motion/servo-drives/i-o-components/el7041.html</a>
Beckhoff EL7047	<a href="http://www.beckhoff.com/en-us/products/i-o/ethernet-terminals/el7xxx-compact-drive-technology/el7047.html">http://www.beckhoff.com/en-us/products/i-o/ethernet-terminals/el7xxx-compact-drive-technology/el7047.html</a>  This stepper drive doesn't support position modes.
Delta R1-EC5621	<a href="http://www.deltaww.com/zh-tw/products/06020302/3291/">http://www.deltaww.com/zh-tw/products/06020302/3291/</a> (Traditional Chinese)
Fastech Ezi-SERVO II EtherCAT	<a href="http://fastech.co.kr/new/board/bbs/board.php?bo_table=sub010207_en">http://fastech.co.kr/new/board/bbs/board.php?bo_table=sub010207_en</a>
Fastech Ezi-SERVO II 4X EtherCAT	<a href="http://fastech.co.kr/new/eng/sub0102-1001.php">http://fastech.co.kr/new/eng/sub0102-1001.php</a>
Fastech Ezi-Step II	<a href="http://fastech.co.kr/new/eng/sub0105-0701.php">http://fastech.co.kr/new/eng/sub0105-0701.php</a>

<b>Device</b>	<b>Information</b>
Kinco FM880	<a href="http://en.kinco.cn/productdetail/fmxlzxbjqdq52.html">http://en.kinco.cn/productdetail/fmxlzxbjqdq52.html</a>
Leadshine DM3E-556	<a href="http://www.leisai.com/cn/cpzx/index_36_lcid_327_lcid_22_cid_269.html">http://www.leisai.com/cn/cpzx/index_36_lcid_327_lcid_22_cid_269.html</a> (Simplified Chinese)
Leadshine DM3E-870	<a href="http://www.leisai.com/cn/cpzx/index_36_lcid_328_lcid_22.html">http://www.leisai.com/cn/cpzx/index_36_lcid_328_lcid_22.html</a> (Simplified Chinese)
MOONS' SSDC06-EC	<a href="http://www.moonsindustries.com/series/ssdc-series-step-servo-drives-a01030107">http://www.moonsindustries.com/series/ssdc-series-step-servo-drives-a01030107</a>
MOONS' STF06-ECX	<a href="http://www.moons.com.cn/m/p/stf-stepper-drives/stf06-ecx-000004696351004725">http://www.moons.com.cn/m/p/stf-stepper-drives/stf06-ecx-000004696351004725</a> (Simplified Chinese)
MOONS' STF-ECX-H series	<a href="https://www.moonsindustries.com/series/stf-series-fieldbus-control-dc-stepper-drives-a010201">https://www.moonsindustries.com/series/stf-series-fieldbus-control-dc-stepper-drives-a010201</a>
MOONS' SSDC06-ECX-H	<a href="http://www.moons.com.cn/p/ssdc-ecx-h-series-step-servo-drives/ssdc06-ecx-h-000004696351004288">http://www.moons.com.cn/p/ssdc-ecx-h-series-step-servo-drives/ssdc06-ecx-h-000004696351004288</a> (Simplified Chinese)
MOONS' SSDC06W-EC-H	<a href="http://www.moons.com.cn/p/ssdcw-ec-h-series-step-servo-drives/ssdc06w-ec-h-000004696351003965">http://www.moons.com.cn/p/ssdcw-ec-h-series-step-servo-drives/ssdc06w-ec-h-000004696351003965</a> (Simplified Chinese)
MOONS' STF06-EC	<a href="https://www.moonsindustries.com/series/stf-series-fieldbus-control-dc-stepper-drives-a010201">https://www.moonsindustries.com/series/stf-series-fieldbus-control-dc-stepper-drives-a010201</a>
Oriental Motor AZD2A-KED	<a href="https://catalog.orientalmotor.com/item/all-categories-legacy-products/azd-multi-axis-drivers-legacy/azd2a-ked">https://catalog.orientalmotor.com/item/all-categories-legacy-products/azd-multi-axis-drivers-legacy/azd2a-ked</a>
Oriental Motor AZD3A-KED	<a href="https://catalog.orientalmotor.com/item/az-series-multi-axis-controllers-drivers/ethernet-multi-axis-controllers-az-dc-input/azd3a-ked">https://catalog.orientalmotor.com/item/az-series-multi-axis-controllers-drivers/ethernet-multi-axis-controllers-az-dc-input/azd3a-ked</a>
Oriental Motor AZD4A-KED	<a href="https://catalog.orientalmotor.com/item/az-series-multi-axis-controllers-drivers/ethernet-multi-axis-">https://catalog.orientalmotor.com/item/az-series-multi-axis-controllers-drivers/ethernet-multi-axis-</a>

Device	Information
	<a href="#">controllers-az-dc-input/azd4a-ked</a>
Oriental Motor AZD-CED	<a href="https://catalog.orientalmotor.com/item/ethercat-compatible-drivers/ries-ethercat-compatible-drivers-ac-input/azd-ced">https://catalog.orientalmotor.com/item/ethercat-compatible-drivers/ries-ethercat-compatible-drivers-ac-input/azd-ced</a>
SANMOTION Model No.PB	<a href="http://bit.ly/2EgWnkc">http://bit.ly/2EgWnkc</a>
Servotronix stepIM	<a href="http://www.servotronix.com/product/stepim-integrated-closed-loop-steppers/">http://www.servotronix.com/product/stepim-integrated-closed-loop-steppers/</a>
TPM STP-K121-KIT	<a href="http://www.tpm-pac.com/product-2/ethercat-2/">http://www.tpm-pac.com/product-2/ethercat-2/</a>
TPM STP-K121B	<a href="http://www.tpm-pac.com/product-2/ethercat-2/">http://www.tpm-pac.com/product-2/ethercat-2/</a>
TROY SDR-D2-60	<a href="http://www.troymotor.com/en/page-1477/STEPPER-MOTOR-DRIVER-SERIES.html">http://www.troymotor.com/en/page-1477/STEPPER-MOTOR-DRIVER-SERIES.html</a>

# I/O modules

Device	Information
Advantech ADAM-5000 series	<a href="http://bit.ly/2RKLX6y">http://bit.ly/2RKLX6y</a>
Advantech AMAX-4800 series	<a href="http://bit.ly/3vGqXw8">http://bit.ly/3vGqXw8</a>
Beckhoff BK1120	<a href="http://bit.ly/3mWwxqX">http://bit.ly/3mWwxqX</a>
Beckhoff EtherCAT Terminals, digital input: EL1002, EL1004, EL1008, EL1012, EL1014, EL1018, EL1024, EL1034, EL1084, EL1088, EL1094, EL1098, EL1104, EL1114, EL1124,	<a href="http://bit.ly/3mVJcdM">http://bit.ly/3mVJcdM</a>

Device	Information
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EL1134,  
EL1144,  
EL1202,  
EL1252-0050,  
EL1262,  
EL1702,  
EL1712,  
EL1722,  
EL1804,  
EL1808,  
EL1809,  
EL1814,  
EL1819,  
EL1859,  
EL1862,  
EL1872,  
EL1889,  
EL1904,  
EL1918

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Beckhoff <http://bit.ly/3duA90g>  
EtherCAT  
Terminals,  
digital output:

EL2002,  
EL2004,  
EL2008,  
EL2022,  
EL2024,  
EL2032,  
EL2034,  
EL2042,  
EL2084,

<b>Device</b>	<b>Information</b>
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EL2088,  
EL2124,  
EL2202,  
EL2212,  
EL2252,  
EL2262,  
EL2502,  
EL2521,  
EL2535,  
EL2595,  
EL2602,  
EL2612,  
EL2622,  
EL2624,  
EL2712,  
EL2722,  
EL2732,  
EL2798,  
EL2808,  
EL2809,  
EL2828,  
EL2872,  
EL2889,  
EL2904

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Beckhoff <http://bit.ly/3alm9Ux>

EtherCAT  
Terminals,  
analog input:

EL3001,  
EL3002,  
EL3004,



<b>Device</b>	<b>Information</b>
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EL3008,  
EL3011,  
EL3012,  
EL3014,  
EL3021,  
EL3022,  
EL3024,  
EL3041,  
EL3042,  
EL3044,  
EL3048,  
EL3051,  
EL3052,  
EL3054,  
EL3058,  
EL3061,  
EL3062,  
EL3064,  
EL3068,  
EL3101,  
EL3102,  
EL3104,  
EL3111,  
EL3112,  
EL3114,  
EL3121,  
EL3122,  
EL3124,  
EL3141,  
EL3142,  
EL3144,  
EL3151,  
EL3152,

Device	Information
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EL3164,  
EL3201,  
EL3202,  
EL3204,  
EL3208,  
EL3255,  
EL3311,  
EL3312,  
EL3314,  
EL3318,  
EL3351,  
EL3356,  
EL3443,  
EL3602,  
EL3611-1030,  
EL3612,  
EL3632,  
EL3681,  
EL3692,  
EL3751

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Beckhoff <http://bit.ly/3gna3y6>  
EtherCAT  
Terminals,  
analog output:

EL4001,  
EL4002,  
EL4004,  
EL4008,  
EL4011,  
EL4012,  
EL4014,  
EL4018,  
EL4021,

Device	Information
EL4022, EL4024, EL4028, EL4031, EL4032, EL4034, EL4038, EL4102, EL4104, EL4112, EL4114, EL4122, EL4124, EL4132, EL4134	
Beckhoff EtherCAT Terminals, position measurement:  EL5101, EL5151, EL5152	<a href="http://bit.ly/3sDzaPL">http://bit.ly/3sDzaPL</a>
Beckhoff EtherCAT Terminals, communicatio n:  EL6001, EL6002, EL6021, EL6022,	<a href="http://bit.ly/3e6zr8g">http://bit.ly/3e6zr8g</a>

Device	Information
EL6224, EL6695, EL6751, EL6900	
Beckhoff EL7342 EtherCAT terminal	<a href="http://bit.ly/3tuB729">http://bit.ly/3tuB729</a>
Beckhoff EtherCAT Terminals, system: EL9110, EL9160, EL9210, EL9260, EL9410, EL9505, EL9508, EL9510, EL9512, EL9515, EL9560	<a href="http://bit.ly/3mVRZfG">http://bit.ly/3mVRZfG</a>
Beckhoff EP (P)1008, EPP1321, EPP1332, EPP1342, EP (P)1809, EP (P)2008, EP (P)2028, EP (P)2308, EP	EP1xxx: <a href="http://bit.ly/3tAq47u">http://bit.ly/3tAq47u</a> EPP1xxx: <a href="http://bit.ly/3gi7u0d">http://bit.ly/3gi7u0d</a> EP2xxx: <a href="http://bit.ly/3gidICE">http://bit.ly/3gidICE</a> EP23xx: <a href="http://bit.ly/2P0sqqR">http://bit.ly/2P0sqqR</a> EPP2xxx: <a href="http://bit.ly/3uZKk2H">http://bit.ly/3uZKk2H</a> EP3xxx: <a href="http://bit.ly/3dvQ7XQ">http://bit.ly/3dvQ7XQ</a> EPP3xxx: <a href="http://bit.ly/3mYnKok">http://bit.ly/3mYnKok</a>

Device	Information
(P)2316, EP (P)2339, EP (P)2809, EP (P)3174, EP (P)3314, EP (P)3744, EP (P)4174, EP (P)4374, EP6224, EP (P)6228, EP (P)7342	EP4xxx: <a href="http://bit.ly/32sS3Kg">http://bit.ly/32sS3Kg</a> EPP4xxx: <a href="http://bit.ly/3swkH7Q">http://bit.ly/3swkH7Q</a> EP6xxx: <a href="http://bit.ly/3swf0af">http://bit.ly/3swf0af</a> EPP6xxx: <a href="http://bit.ly/2RMstOv">http://bit.ly/2RMstOv</a> EP7xxx: <a href="http://bit.ly/2Q4WKYp">http://bit.ly/2Q4WKYp</a> EPP7xxx: <a href="http://bit.ly/2Q4WPLH">http://bit.ly/2Q4WPLH</a>
Berghof E I/O modules	<a href="https://www.ethercat.org/en/products/2722316BBE5E4662B715E1F1CC25C673.htm">https://www.ethercat.org/en/products/2722316BBE5E4662B715E1F1CC25C673.htm</a>
Berghof ECC I/O modules	<a href="https://www.sdt.se/eur/products/controllers/plc/berghof-controllers/berghof-ecc.html">https://www.sdt.se/eur/products/controllers/plc/berghof-controllers/berghof-ecc.html</a>
Brunner GER1085 I/O module	<a href="http://www.brunner-innovation.swiss/product/ethercat-io/">http://www.brunner-innovation.swiss/product/ethercat-io/</a>
DECOWELL: EC-HH00- C1NN EX-1100 EX-310H EX-210H EX-5454 EX-4454	<a href="http://www.wellinkio.com/product/50.html">http://www.wellinkio.com/product/50.html</a> (Simplified Chinese)
Dinkle GFE- BR01, GFE- BR02, GFE-	<a href="http://www.dinkle.com/en/home">http://www.dinkle.com/en/home</a>

Device	Information
DI01, GFE- DI02, GFE- DQ01, GFE- DQ02	
Fastech Ezi-IO	<a href="http://fastech.co.kr/new/eng/sub0111.php">http://fastech.co.kr/new/eng/sub0111.php</a>
Hofu Kingservo: KSTE-P- DO32N KSTE-P-DI32N KSTE-P-DR12	<a href="http://www.hofu.com.tw/zh-tw/goods.php?act=view&amp;id=12">http://www.hofu.com.tw/zh-tw/goods.php?act=view&amp;id=12</a> (Traditional Chinese)
ICPDAS ECAT- 2045	<a href="http://bit.ly/3affStv">http://bit.ly/3affStv</a>
ICPDAS ECAT- 2050	<a href="http://bit.ly/3abk2Td">http://bit.ly/3abk2Td</a>
ICPDAS ECAT- 2051	<a href="http://bit.ly/3ssnyie">http://bit.ly/3ssnyie</a>
ICPDAS ECAT- 2052	<a href="http://bit.ly/2QpImcW">http://bit.ly/2QpImcW</a>
ICPDAS ECAT- 2053	<a href="http://bit.ly/3e5KD5a">http://bit.ly/3e5KD5a</a>
ICPDAS ECAT- 2055	<a href="http://bit.ly/2RE8oKa">http://bit.ly/2RE8oKa</a>
ICPDAS ECAT- 2055-32	<a href="http://bit.ly/3mU4gkx">http://bit.ly/3mU4gkx</a>
ICPDAS ECAT- 2060	<a href="http://bit.ly/3ag0Svq">http://bit.ly/3ag0Svq</a>

<b>Device</b>	<b>Information</b>
KEYENCE CB-NEC20E	<a href="https://www.keyence.com/products/measure/laser-2d/lj-x8000/models/cb-nec20e/">https://www.keyence.com/products/measure/laser-2d/lj-x8000/models/cb-nec20e/</a>
Kuhnke Ventura Fast IO (VFIO)	<a href="http://bit.ly/2IYUrIJ">http://bit.ly/2IYUrIJ</a>
Nexcom AXE9200	<a href="http://bit.ly/3an7WXc">http://bit.ly/3an7WXc</a>
Nexcom NEIO-B1811/B1812	<a href="http://bit.ly/3x1JXXn">http://bit.ly/3x1JXXn</a>
Omron GX Remote I/O terminals	<a href="http://bit.ly/3xfe1in">http://bit.ly/3xfe1in</a>
PLANET: IECS-1116-DI IECS-1116-DO	<a href="https://www.planet.com.tw/en/search?keyword=IECS-1116-DIGIO">https://www.planet.com.tw/en/search?keyword=IECS-1116-DIGIO</a>
Prima Electro C-101	<a href="http://www.primaelectro.com/en/">http://www.primaelectro.com/en/</a>
Prima Electro C-201	<a href="http://www.primaelectro.com/en/">http://www.primaelectro.com/en/</a>
Prima Electro E-101	<a href="http://www.primaelectro.com/en/">http://www.primaelectro.com/en/</a>
Prima Electro E-201	<a href="http://www.primaelectro.com/en/">http://www.primaelectro.com/en/</a>
Renesas R-IN32M3	<a href="http://bit.ly/3vpTRRc">http://bit.ly/3vpTRRc</a>
Syn-Tek ESC 6012	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>

<b>Device</b>	<b>Information</b>
Syn-Tek ESC 70E2	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC5500	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC5512	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC6002	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC6022	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC6032	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC7062	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC8124	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
Syn-Tek R1- EC9144	<a href="http://www.deltaww.com/default.aspx?hl=en-US">http://www.deltaww.com/default.aspx?hl=en-US</a>
TPM 207-D240-NX, 207-D204-XN 207-D222-NN, 207-A202F, 207-A202FH, 207-A203F, 207-A204F, 207-A220FID, 207-A220FD	<a href="http://www.tpm-pac.com/products/?filters=product_cat%5B44%5D">http://www.tpm-pac.com/products/?filters=product_cat%5B44%5D</a>



<b>Device</b>	<b>Information</b>
Vitrox iD5016-1B	Website is unavailable.
XINJE XINJE-LC3-AP	<a href="https://college.xinje.net/uncategorized/">https://college.xinje.net/uncategorized/</a> (Simplified Chinese)
YOUTOOL: EC- MX16Y16LT- MA EC-MX32LT- MA EC-MY32RT-T- JSP	<a href="https://www.youtool.com.tw/products.php">https://www.youtool.com.tw/products.php</a> (Traditional Chinese)

# Couplers

EtherCAT couplers can be connected to different modules, but only the coupler itself has the EtherCAT capability. These modules don't have the clock synchronization and their polling is slow.

## Balluff

Coupler	Information
BNI0077 IO-Link master	<a href="http://www.balluff.com/en/de/productfinder/product/?key=BNI0077#/">http://www.balluff.com/en/de/productfinder/product/?key=BNI0077#/</a>

## Beckhoff

Coupler	Information
EK1100, EK1101, EK1110, EK1122, EK1501, EK1541, EK1814, EK1818, EK1828	<a href="http://www.beckhoff.com/en-us/products/i-o/ethercat-terminals/ek1xxx-bk1xx0-ethercat-coupler/">http://www.beckhoff.com/en-us/products/i-o/ethercat-terminals/ek1xxx-bk1xx0-ethercat-coupler/</a>

## Friedrich Lütze

Coupler	Information
LCOS-BC-PN	<a href="http://www.luetze.com/catalogue/control/industrial-communication-bus-coupler-0/7780001301-profinet-bus-coupler-0/">http://www.luetze.com/catalogue/control/industrial-communication-bus-coupler-0/7780001301-profinet-bus-coupler-0/</a>

## Festo

Coupler	Information
CPX-AP-I-EC-M12	<a href="http://www.festo.com/us/en/a/8086609/?q=~:orderCode-asc">http://www.festo.com/us/en/a/8086609/?q=~:orderCode-asc</a>

## ICPDAS

Coupler	Information
ICPDAS ECAT-2093 Three-Channel Incremental Encoder Counter	<a href="http://www.icpdas.com/en/product/ECAT-2093">http://www.icpdas.com/en/product/ECAT-2093</a>

## IFM

Coupler	Information
IFM AL1332 IO-Link master	<a href="http://www.ifm.com/tw/zh/product/AL1332">http://www.ifm.com/tw/zh/product/AL1332</a> (Traditional Chinese)

## National Instrument

Coupler	Information
NI-9144, NI-9145 CompactRIO Chassis	<a href="http://www.ni.com/en-us/support/model.ni-9144.html">http://www.ni.com/en-us/support/model.ni-9144.html</a> <a href="http://www.ni.com/en-us/support/model.ni-9145.html">http://www.ni.com/en-us/support/model.ni-9145.html</a>

## Omron

Coupler	Information
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Omron NX-ECC203 series

<http://industrial.omron.eu/en/products/NX-ECC203>

## PHOENIX CONTACT

Coupler	Information
AXL E EC IOL8 DI4 M12 6P	<a href="http://bit.ly/2nHBG80">http://bit.ly/2nHBG80</a>
Bus Coupler - AXL F BK EC	<a href="http://bit.ly/29xnbeh">http://bit.ly/29xnbeh</a>
IL EC BK-PAC	<a href="http://bit.ly/34k0VDY">http://bit.ly/34k0VDY</a>

## WAGO

Coupler	Information
750-354 EtherCAT Fieldbus Coupler	<a href="http://www.wago.com/us/controllers-bus-couplers-i-o/fieldbus-coupler-ethernetcat/p/750-354">http://www.wago.com/us/controllers-bus-couplers-i-o/fieldbus-coupler-ethernetcat/p/750-354</a>

## Weidmüller

Coupler	Information
UR20-4DI-P	<a href="http://bit.ly/2rkBT4X">http://bit.ly/2rkBT4X</a>
UR20-FBC-EC	<a href="http://bit.ly/2qxTtkz">http://bit.ly/2qxTtkz</a>
UR67-MP-78-8DIDO-12-60M	<a href="http://bit.ly/2pZpVd8">http://bit.ly/2pZpVd8</a>

## YASKAWA

Coupler	Information
VIPA SLIO EtherCAT Coupler	<a href="http://www.vipa.com/en/products/io-systems/slio/">http://www.vipa.com/en/products/io-systems/slio/</a>

# Others

Device	Information
Adaptive Robot Gripper 2-Finger	<a href="http://robotiq.com/products/adaptive-robot-gripper/">http://robotiq.com/products/adaptive-robot-gripper/</a>
Advantech AMAX-3285IO slave module <sup>1</sup>	<a href="http://bit.ly/2T6NX5i">http://bit.ly/2T6NX5i</a>
CKD OPP6 series	<a href="http://www.ckd.co.jp/kiki/en/">http://www.ckd.co.jp/kiki/en/</a>
dieEntwickler RapidoScan	<a href="http://www.rapidoscan.com/">http://www.rapidoscan.com/</a>
Hitachi EH IOCA	<a href="http://hiflex.nl/eh-ioca">http://hiflex.nl/eh-ioca</a>
*Hilscher CIFX RE/ECS	<a href="http://www.hilscher.com/products/product-groups/pc-cards/">http://www.hilscher.com/products/product-groups/pc-cards/</a>
Inovance AM600	<a href="https://www.inovance.eu/products/motion-controllers-i/o-modules/am600-motion-controllers">https://www.inovance.eu/products/motion-controllers-i/o-modules/am600-motion-controllers</a>
Interface PCI-450601	<a href="http://www.interface.co.jp/catalog/prdc.asp?name=pci-450601">http://www.interface.co.jp/catalog/prdc.asp?name=pci-450601</a> (Japanese)
ITRI PIC32 Slaves	<a href="http://www.itri.org.tw/english/">http://www.itri.org.tw/english/</a>
Kashiyama ECAT01	<a href="http://www.kashiyama.com/en/">http://www.kashiyama.com/en/</a>
Omron 3G3AX-MX2-ECT inverter	<a href="http://automation.omron.com/en/us/products/family/3G3MX2">http://automation.omron.com/en/us/products/family/3G3MX2</a>
Omron GX-JC03 / JC06 junction slave	<a href="http://www.ia.omron.com/products/family/3079/">http://www.ia.omron.com/products/family/3079/</a>
Leuze bar code scanner BCL 338i	<a href="http://bit.ly/3yAzseU">http://bit.ly/3yAzseU</a>

Device	Information
Nagano Oki NOKECW R- IN32M3-EC	<a href="http://www.oki-ont.jp/dms/ether.html">http://www.oki-ont.jp/dms/ether.html</a> (Japanese)
National Instrument  CompactRIO Chassis: NI-9144, 9145  Modules: NI-9201, 9203, 9205, 9206, 9207, 9208, 9209, 9210-9220, 9221- 9229, 9234-9237, 9239, 9242, 9244, 9263-9266, 9269, 9344, 9375, 9381, 9401-9403, 9411, 9421-9423, 9425- 9426, 9435-9437, 9472, 9474-9478, 9481-9482, 9485, 9512, 9514, 9516	<a href="http://bit.ly/2MMYeEa">http://bit.ly/2MMYeEa</a>
Nexcom AXE-5904 EtherCAT slave module <sup>2</sup>	<a href="http://bit.ly/2IQJ4Ms">http://bit.ly/2IQJ4Ms</a>
Panasonic SC- HG1-ETC EtherCAT communication unit	<a href="http://bit.ly/30sOphm">http://bit.ly/30sOphm</a>
Ricoh AP-10A	<a href="http://industry.ricoh.com/industrial-pc/AP-10A/">http://industry.ricoh.com/industrial-pc/AP-10A/</a> (Japanese)
Ropex RES-5012	<a href="http://ropex.de/en/products/temperature-">http://ropex.de/en/products/temperature-</a>

Device	Information
temperature controller	<a href="http://resistron.com/controllers/res-5012.html">controllers/resistron/res-5012.html</a>
Ropex UPT-6012 temperature controller	<a href="http://ropex.de/en/products/temperature-controllers/cirus/upt-6012.html">http://ropex.de/en/products/temperature-controllers/cirus/upt-6012.html</a>
Sick Flexi Soft FX0-GETC EtherCAT Gateway	<a href="http://www.sick.com/tw/en/senscontrol-safe-control-solutions/safety-controllers/flexi-soft/c/g186176">http://www.sick.com/tw/en/senscontrol-safe-control-solutions/safety-controllers/flexi-soft/c/g186176</a>
Sigmatek S-DIAS Anschaltmodul EC121 EtherCAT Gateway Extended CAN Interface AI022 SDIAS Analog Input NC100 SDIAS Position Output ICA011 SDIAS CAN DI080 SDIAS Digital Input SCP011 SDIAS Safety Modules SI021 SDIAS SSI Encoder RS422	<a href="http://www.sigmatek-automation.com/en/products/io-systems/s-dias/">http://www.sigmatek-automation.com/en/products/io-systems/s-dias/</a>
Tem-Tech Lab. ECG-485	<a href="http://www.tem-tech.co.jp/en/products/">http://www.tem-tech.co.jp/en/products/</a>

Device	Information
Toshiba 4-axis SCARA robot controllers TS3000, TSL3000	<a href="http://www.shibaura-machine.co.jp/en/product/robot/lineup/th/ts3000.html">http://www.shibaura-machine.co.jp/en/product/robot/lineup/th/ts3000.html</a> (TS3000) <a href="http://www.shibaura-machine.co.jp/en/product/robot/lineup/th/tsl3000.html">http://www.shibaura-machine.co.jp/en/product/robot/lineup/th/tsl3000.html</a> (TSL3000)
TPM 207-ADIO-KIT	<a href="http://www.tpm-pac.com/product/207-adio-kit/">http://www.tpm-pac.com/product/207-adio-kit/</a>
TPM 207-D402H	<a href="http://www.tpm-pac.com/product-2/ethercat-2/digital-slave-e/digital-i-o-slave-e-di/">http://www.tpm-pac.com/product-2/ethercat-2/digital-slave-e/digital-i-o-slave-e-di/</a>
Trumpf Hüttinger RF generator TruPlasma RF 3006	<a href="http://www.trumpf.com/en_US/products/powerelectronics/plasma-excitation/truplasma-rf-series-1000-3000-g213/">http://www.trumpf.com/en_US/products/powerelectronics/plasma-excitation/truplasma-rf-series-1000-3000-g213/</a>

<sup>1</sup>This device works with KINGSTAR but has had limited testing and users should contact Advantech for information on how to set up the device and develop the custom cable.

<sup>2</sup>Tested with YASKAWA SDGV-R90A01B and Panasonic MADKT1505CA1. These two devices may not work properly when their homing modes are used.

\*Yet to be tested.



# Get support

KINGSTAR offers a number of support options for KINGSTAR users, including third-party, online, and phone support.

## Third-party support

If you are a customer who purchased a KINGSTAR product through a third-party reseller, contact the reseller for support.

## Online support

The KINGSTAR Customer Support web page is located at:

<http://kingstar.com/support/>


The KINGSTAR support web pages provide electronic access to the latest product releases, documentation, and release notes. You can access the online support ticketing system to submit issues or questions.

## Before calling technical support


Please have the following information ready before calling KINGSTAR Technical Support:

### The version number of your RTX64 and KINGSTAR software

To obtain the RTX64 version number:

1. Click Start  > **RTX64 4.3 Runtime** > **RTX64 Control Panel**.
2. In the **RTX64 4.3 Control Panel**, record the **Version** shown in the **Installed Runtime components** area.

To obtain the KINGSTAR version number:

1. Click Start  > **KINGSTAR 4.4 Runtime** > **KINGSTAR Control Panel**. Or, in the notification area, double-click the KINGSTAR icon.
2. In KINGSTAR Control Panel, click **About**.
3. Record the **Version** shown on the page.

## Phone support

For technical support related to installing and using KINGSTAR, please call technical support at this number:

+886-2-2556-8117

Hours are Monday – Friday from 9:30 to 17:30, UTC+08:00, excluding holidays.